

# **Improving Assessment in National Courses Research: Higher Chemistry**

Published: June 2026

# Proposal

The following proposal was shared with respondents who stated they had studied or taught Higher Chemistry:

- We are proposing making the exam for Higher Chemistry shorter, reducing the time from 3 hours to 2 hours 30 minutes. The proposed changes to the exam duration would mean a return to one question paper.
- We would shorten Paper 1 by removing 5 multiple choice questions, and would shorten Paper 2 by removing 15 marks worth of questions, and then combine the two papers.
- We are proposing these changes to improve the exam experience for learners and for schools, while maintaining appropriate sampling of subject content.
- There are no proposed changes to the assignment at this stage. The assessment of practical work will be part of the full reform of National Qualifications.
- The weightings of the exam and the assignment would remain the same.

The proposed changes for Higher Chemistry are:

Component	Current marks	Current duration	Current weighting
Paper 1 + Paper 2	25 + 95	40 Minutes + 2 hours 20 minutes	80%
Assignment	20	N/A	20%

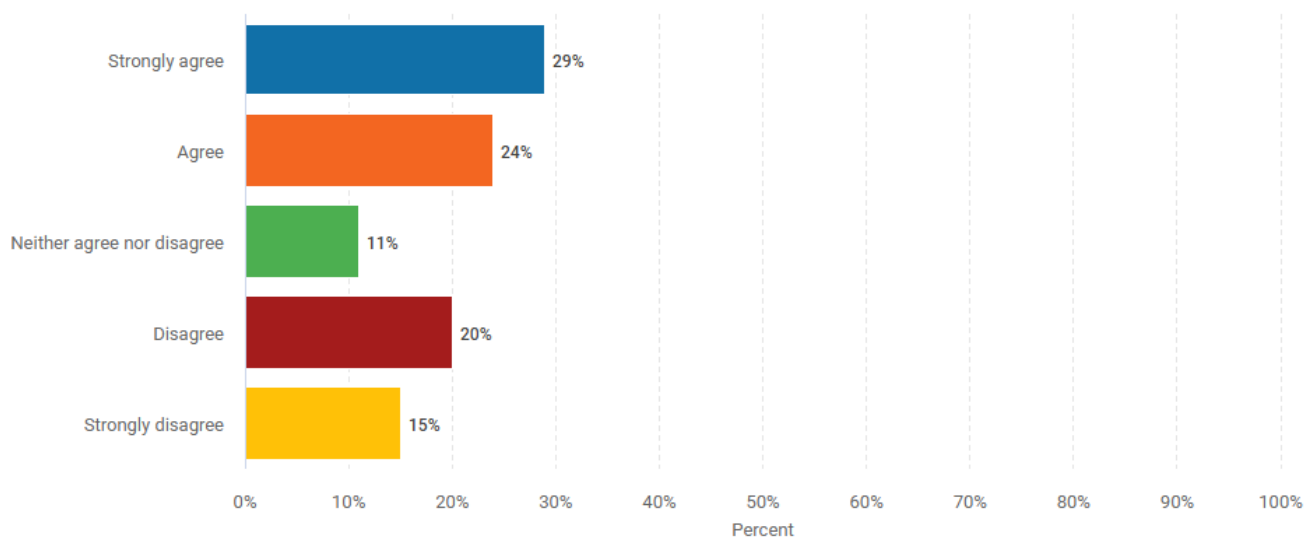
Component	Proposed marks	Proposed duration	Proposed weighting
<b>Section 1 + Section 2</b>	<b>20 + 80</b>	<b>2 hours 30 Minutes (one question paper)</b>	80%
Assignment	20	N/A	20%

## Findings: learners

We received responses from 297 learners who said they had studied Higher Chemistry. As shown in Figure 1, the majority of learner respondents (53%) agreed or strongly agreed with this proposal, while 36% disagreed or strongly disagreed.

**Figure 1: To what extent do you agree or disagree with the proposed changes for Higher Chemistry? Learner views**

To what extent do you agree or disagree with the proposed changes for Higher Chemistry?

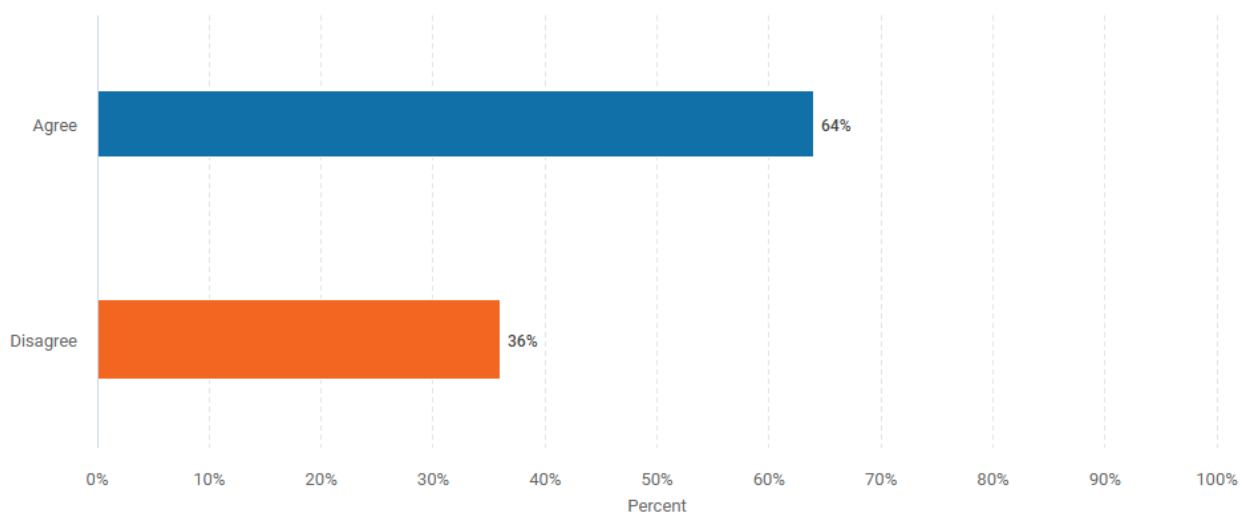


*Base: 297 learners who said they had studied Higher Chemistry*

Respondents were also asked to what extent they agreed with the decision to begin the proposed change in 2026–27, should the change be made. As shown in Figure 2, the majority of learners (64%) agreed that the change should be made from the 2026–27 session, while 36% disagreed.

## Figure 2: In the event that the proposed changes are made for Higher Chemistry, do you agree or disagree that this should happen from session 2026–27? Learner views

In the event that the proposed changes are made for Higher Chemistry, do you agree or disagree that this should happen from session 2026/27?



Base: 296 learners who said they had studied Higher Chemistry

### Qualitative analysis

Learner respondents were asked if they had any further comments that they would like to share about the proposed changes to Higher Chemistry. Fifty three respondents left a comment. While over half (53%) of respondents agreed or strongly agreed with the proposal, almost all comments were from those who expressed that they disagreed with the proposed changes.

### Challenges with making the exam a single paper

Most of the comments that learner respondents expressed a concern that making it one paper instead of two would mean learners having to sit for a longer period of time with no break between papers.

'I believe that there should be a break between section one and section two'

'Separating the two provides a much needed break to refresh'

'I enjoyed being able to focus on paper 1 and then paper 2, definitely better than at Nat 5 where we had to do both'

A couple of learners commented that they preferred having two papers as they could switch their focus from one set of topics to the other, as two papers provided a clear separation of course content.

## **Challenges with reducing the length of the exam**

A less common view was the perception that the proposed exam length was too short. A few learners expressed that they would not have enough time to complete the paper under the proposed time. One respondent felt that it was too short to allow for learners to be assessed on an appropriate sample of the course content. While another felt more time would be needed to settle into the exam and get over exam nerves.

‘Longer exam means that more content can be assessed and ensures that no areas of the higher course is missed. Since people have strengths and weaknesses in all areas of the course a full assessment doesn't give anyone an advantage/disadvantage.’

‘Chemistry is really confusing so cutting down the time won't help.’

## **Less common themes related to challenges with the proposals**

There were some ideas expressed by one or two learner respondents about why they disagreed with the proposed changes to Higher Chemistry. These were:

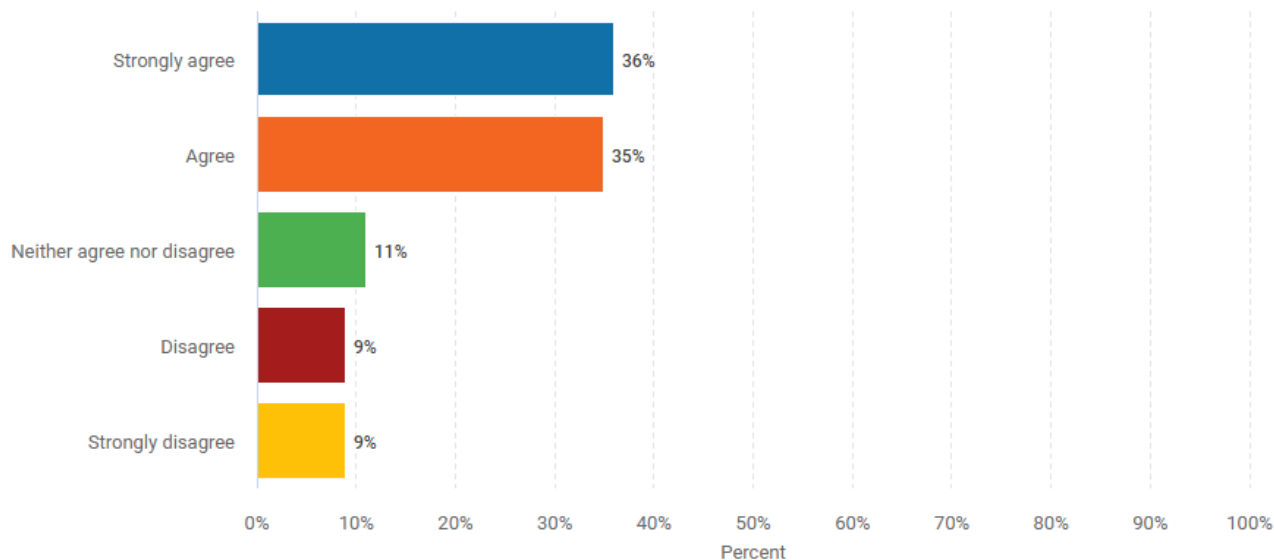
- The course content would not be sufficiently sampled
- The changes made the exam easier
- The changes were too soon

## Findings: educators

We received responses from 453 educators who said they had taught Higher Chemistry. As shown in Figure 3, over half (71%) of educator respondents agreed or strongly agreed with the proposed changes for Higher Chemistry, while 18% disagreed or strongly disagreed.

**Figure 3: To what extent do you agree or disagree with the proposed changes for Higher Chemistry? Educator views**

To what extent do you agree or disagree with the proposed changes for Higher Chemistry?

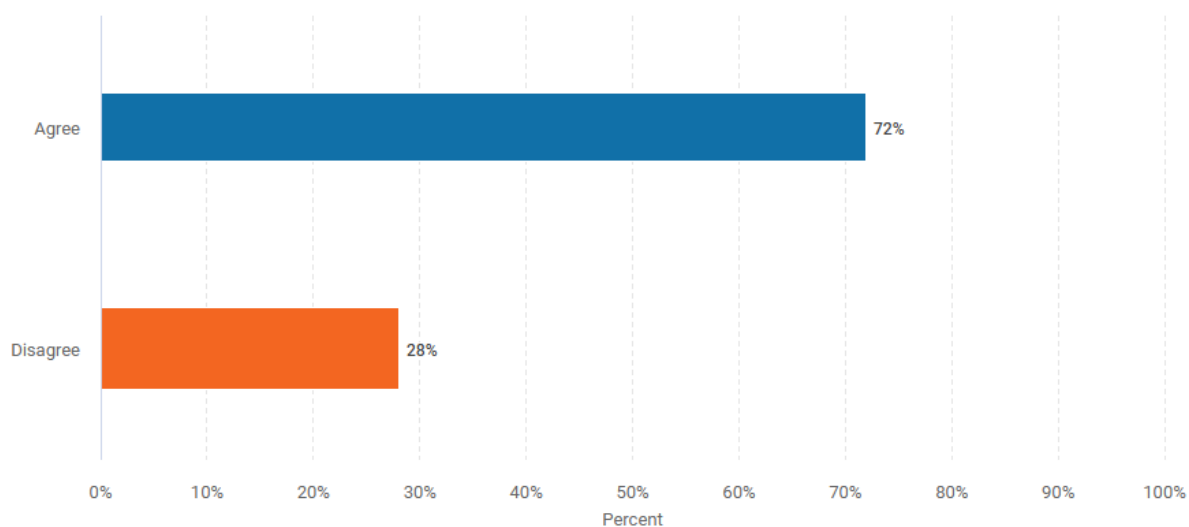


*Base: 453 educators who said they had taught Higher Chemistry*

As shown in Figure 4, when asked, in the event that the proposed changes went ahead, whether they should be implemented from the 2026–27 session, 72% of educator respondents agreed and 28% disagreed.

## Figure 4: In the event that the proposed changes are made for Higher Chemistry, do you agree or disagree that this should happen from session 2026–27? Educator views

In the event that the proposed changes are made for Higher Chemistry, do you agree or disagree that this should happen from session 2026/27?



*Base: 449 educators who said they had taught Higher Chemistry*

### Qualitative analysis

Educator respondents were asked if they had any further feedback they would like to share about the changes being proposed to Higher Chemistry and 188 respondents left a comment. Although the most common response from educator respondents was to agree with the proposals, a large majority of comments were from respondents who expressed a preference for restructuring or changing the assignment instead of the question paper. There were also several responses that wanted the course content to be reduced along with the marks.

There were many positive comments welcoming the reduced marks and going to one paper instead of two. They felt this would ensure consistency through all three levels of Chemistry.

### Benefits of changes to the question paper

#### Benefits of a single exam paper

A strong theme that emerged from educator respondents who agreed with the proposals was in regards to making the exam one paper instead of two. They felt that this would allow learners to manage their time better and keep their momentum going, instead of having to take a break and lose focus between two papers.

‘Moving to a single question paper eliminates the unnecessary downtime and logistical "reset" between Paper 1 and Paper 2, allowing learners to maintain their focus and momentum.’

‘Most pupils find that the time to complete the written paper is much tighter and would prefer one paper as they also feel that the multiple choice helps them when it is fresher and often complain about the two papers after the prelim.’

‘I think making the paper the same format (ie in one sitting) as N5 and AH gives continuity to pupils.’

Furthermore, some educators felt that making the paper the same format at National 5 and Higher would provide continuity through qualifications.

### **Flexibility within the question paper**

Some educator respondents also felt that another benefit would be that learners could use their extra time from the multiple-choice questions to check over their other written answers. For these respondents, this time would be wasted if learners were still having to sit two papers with a break in between.

‘I think this makes sense. I think candidates can find multiple choice easier and so frees up some time for Section 2.’

‘Most pupils find that the time to complete the written paper is much tighter and would prefer one paper as they also feel that the multiple choice helps them when it is fresher and often complain about the two papers after the prelim.’

‘One paper allows pupils to continue to use their time management skills to ‘borrow’ time from the multiple choice section to further/better complete the extended response section.’

Educators felt that this would benefit learners as their learners had experienced different time pressures between the two question papers.

### **Continuity with other levels**

Several educator respondents also mentioned that the change to one question paper would bring continuity with National 5 Chemistry and Advanced Higher Chemistry. Some explained that it was confusing for learners to prepare for two question papers for Higher and then go return to one question paper for Advanced Higher.

‘I like that there is one paper - pulling H in line with N5 and AH’

‘I think making the paper the same format (i.e. in one sitting) as N5 and AH gives continuity to pupils.’

## **Time and Additional Support Needs**

A couple of educators also felt that another benefit would be that it reduces the pressure on schools that have learners with additional support needs as they felt that long exams can be very difficult for them to organise or accommodate.

‘The level of additional support needs alone make this a priority. Schools are struggling to finish exams in the allotted calendar window of an afternoon or morning.’

‘For students receiving extra time, a 3-hour exam can extend to nearly 4 hours, which is physically and mentally exhausting. A 2.5-hour is better for learners with additional support needs.’

## **Challenges with implementing this change**

### **Reduction in marks**

Several educator respondents highlighted challenges that they thought would be an issue with the proposed changes. The main concern they expressed was related to the reduction in marks. These respondents felt that if the number of marks was being reduced, the course content should be reduced. Some explained further that reducing the number of marks while keeping the same amount of course content would not relieve pressure on learners or educators.

‘[...] if you're cutting the marks down then the course should be cut down as well. It seems unfair the students have to revise everything to the same degree but then are asked fewer questions. They have to revise the full breadth of the course when it can't possibly be assessed properly in that time frame.’

‘If the exam is being shortened, then some content should be removed from the course too. It would be very unfair if learners were to study well for a topic and for it not being included in the exam due to the shortened length [...]’

Related to this was the concern that the course content could not be sufficiently sampled within the limits of the number of marks being proposed. Again, some educator respondents who expressed this view often suggested cutting the course content as a solution.

‘I do not think cutting down the questions would allow for maintaining an adequate sample selection of all the Higher content.’

'If the same volume of content is still expected to be assessed then we cannot shorten the time taken to summatively assess it'

'Just cutting marks/time without rebalancing content and expectations. Currently each major area of chemistry is assessed; reducing total marks would shrink the opportunity to assess across all areas unless other adjustments are made'

## **Validity of exam**

There were also some educator respondents who believed that reducing marks and length of the exam would impact on its validity. Some indicated that they thought the changes would make the exam easier and impact on learners' ability to have an appropriate knowledge of chemistry.

'I agree the exam being one continuous exam but that the time should be remain at 3 hours. This is essential to maintain the integrity of the course and prepare pupils for the transition to AH. This is already a significant jump as pupils are left unprepared for the complexities of AH due to the dilution of content and challenge of the course from Revised Higher.'

'I am concerned that changes will reduce the breadth scope and depth of the exam. Fewer questions will provide less opportunity to test the depth of understanding of candidates and differentiate between learners and grades. I am concerned that this will devalue our premium grade and further widen the gap between it and other qualifications in other jurisdictions such as A level.'

## **Prefer two papers**

Several educator respondents indicated that keeping two papers would be more beneficial to learners than the one paper that was being proposed, though there were varied reasons for this. Some explained that learners benefitted from the break in break to recharge, and do some last-minute revision. Others explained that it was helpful for learners to manage their time between the different types of questions in the paper. A few also indicated that one paper, with the time being proposed, would be too long for learners.

'I personally disagree with the idea to make it one paper rather than keeping the two papers separate. The skills covered in Section 1 are highly weighted towards applying their knowledge, and it allows the pupils to focus on ensuring they are reading the questions carefully and being able to have the appropriate time to do this is essential for them to showcase their knowledge. Having more calculation based answers in Section 2 separate helps to differentiate the skills between the two sections, and also boost the confidence for the pupils to reduce exam stress.'

'I think it is extremely advantageous to allow students a break between paper 1 and paper 2. Without such a break, I think it would lead to a lower level of attainment.'

### **Higher stakes for learners**

A few educator respondents expressed a concern that reducing the number of marks would mean that each mark would carry more weight to the learner's grade. These respondents felt that it could be an issue if a candidate struggled on a particular area as they felt there would be a bigger impact on their grade than when the paper had more marks.

'[...] reducing the number of questions while keeping the exam weighting at 80% will raise the value of individual questions which will lead to penalties for a single minor error being so much higher.'

'If the exam has fewer marks it inherently becomes more difficult and the stakes for each mark become higher. This would increase pressure and mental load on pupils.'

Educator respondents viewed this as negatively impacting on learners' ability to achieve, as it would be down to chance which topics were included in the exam, and which were omitted.

### **Changes being implemented in 2026–27**

While there was strong support for the changes being implemented in 2026–27 in the quantitative questions, some educator respondents expressed concerns in the open-text comments that this change was being proposed too soon. Some said that they would need more time to prepare resources, such as writing prelims and teaching learners the new course from June 2026.

'It is too soon to change courses by next term for teachers and students this requires time for teachers and students to prepare.'

'Give schools time to adjust assessments and start in 2027–28'

### **Alternative suggestions**

Some educator and learner respondents used the free text box to give varying suggestions for alternative changes that they felt should be made to Higher Chemistry. We haven't included these comments in the analysis, as they did not directly answer the research questions and were out of scope of this research. We passed the comments on to our Qualifications Development teams to make them aware of the themes that emerged on this topic. We'll consider alternative changes to National Courses as part of wider qualifications reform in the future, and learners and educators will have opportunities to share their views and input more directly to this work.